

When planning or conducting work on UC ANR facilities, it is important to assess whether the activity may be considered Maintenance or Construction. This distinction is important to assess how the work may be accomplished (UC employees and/or contractors), how a contractor is obtained (procurement vs. construction contracting), and other factors such as insurance requirements, bonding, etc. The UC Facilities Manual has definitions for maintenance and construction and prescribes the detailed requirements for each type of activity.

Definitions (UC Facilities Manual, Volume 6, Chapter 1.3.2)

Maintenance: Maintenance is the upkeep of property, machinery, systems, and facilities, including buildings, utility infrastructure, roads, and grounds.

Maintenance consists of those activities necessary to keep facilities and systems operational and in good working order. It consists of the preservation, but not the improvement, of buildings and grounds, other real property improvements and their components.

Maintenance may include replacement of components of equipment or building systems (roof, flooring, HVAC, etc.) if replacement is performed:

- on a routine or recurring basis,
- to bring the equipment or building system back to its fully functional state,
- to ensure the equipment or building system retains its functionality for its anticipated useful life.

Construction: Construction consists of moving, demolishing, altering, upgrading, renovating, installing, or building a structure, facility, or system according to a plan or by a definite process.

- Construction consists of the application of any of the above techniques to physical facilities such as structures, utilities, excavations, landscaping, site improvements, drainage systems, and roads; and additions, deletions, or modifications of such facilities.
- All painting, regardless of whether exterior or interior painting of new or existing structures, is a form of construction. However, University personnel may perform small painting projects, if the value of the painting or repainting project is less than \$25,000.
- Upgrading or replacing a building system in its entirety when it has exceeded its useful life is generally construction, not maintenance.

Note: If the work associated with replacement of a system's component(s) is greater than 50% of the replacement value of its system, such work is considered a system replacement and shall be considered repair and beyond the scope of maintenance.

Repair: Repair means to restore property, machinery, systems, and facilities, including buildings, roads, and grounds and their components to working order. Repair may require:

- the submission of plans;
- the submission of calculations;
- construction inspection; and other data to ensure compliance with the California Building Code;
- and/or requires a change to the stamped plans, specifications, reports or documents used for its construction.

Repair does not include any matter that could reasonably be characterized as maintenance. Repair is a type of Construction.

Examples

Function or Equipment	Maintenance	Construction
HVAC system	Replacing component parts (pumps, fans, thermostat, exhaust and ventilation units, heat exchangers) to maintain or restore operation. Replacement of entire system with same system or like system	Upgrading system to increase capacity or functionality. Replacement of more than 50% of component parts.
Electrical	Replacing equipment such as transformers, panels, lighting, switches, controls, receptacles, motors, etc.	Upgrading system or components to increase capacity, efficiency, distribution, improve service, etc. Replacement of more than 50% of component parts.
Plumbing	Replacing parts or systems to maintain or restore operation.	Upgrading system or components to increase capacity, efficiency, distribution, improve service, etc. Replacement of more than 50% of component parts.
Roadways	Routine activities to maintain safety and utility of roadways. Could include sealing, grading, etc.	One-time repair of damage, any work that upgrades, widens, or changes the layout of the roadways.
Painting	All painting is considered Construction	All painting projects are considered Construction. However, University personnel may perform small painting projects, if the value of the painting or repainting project is less than \$25,000. This can allow routine touch-up painting of university facilities by UC personnel.

Contact UC ANR Facilities Planning & Management to discuss a project if you are unsure if it is maintenance or construction.

Performance of Construction Work

Construction projects must comply with the UC Facilities Manual and [CA Public Contract Code Sections 10500-10506](#) and will be managed by UC ANR Facilities Planning & Management (FPM). FPM will work with ANR locations to define the scope of work, obtain bids as necessary, and issue contracts for design consultants and/or construction contractors. Guidance regarding planning, bidding, contracting, management, and implementation of Construction projects is provided in separate documents.

Performance of Maintenance Work

Work that is solely maintenance, as defined above, may be performed by either University employees or under contract. If performed under contract, maintenance work is subject to non-construction competitive bidding requirements for contracts costing \$50,000 or more, regardless of the form of contract.

When hiring a contractor or vendor to perform maintenance work, ANR locations may work through their business officer and UC Davis procurement to arrange maintenance services using a purchase requisition or similar procurement process, depending on the value of the work. This procurement must follow BFB-BUS-43 Purchases of Goods and Services.

Work that involves the painting or repainting of a structure, building, road, or improvement of any kind cannot be defined as solely maintenance, as painting of any kind is considered construction.

University employees may perform maintenance projects if the value of the work to be performed does not exceed \$50,000. However, the University may not use university employees if the scope of the work is painting or repainting and exceeds \$25,000.

References

UC Facilities Manual Volume 6 Chapter 7 Operation and Maintenance

<https://www.ucop.edu/facilities-manual/manual/volume-6/vol-6-chapter-1.html#1-3>

BFB_BUS_09.Purchases.of.Goods.and.Services; <https://policy.ucop.edu/doc/3220485/BFB-BUS-43>